REMARKS

Applicants respectfully request reconsideration of the above referenced patent application in view of the amendments and remarks set forth herein, and respectfully request that the Examiner withdraw all rejections. Claim 1 has been amended. No claims have been canceled. No claims have been added. Thus, claims 1-10 and 12-15 are pending.

REJECTIONS UNDER 35 U.S.C. §103

Claims 1-10 and 12-15

These claims are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Boucher, USPN 6,434,620 (hereinafter "*Boucher*") in view of "Introduction to the Remote Monitoring (RMON) family of MIB Modules" by Waldbusser, Cole, Kalbfleisch, and Romascanu, (hereinafter "*Waldbusser*") and Kraslavsky, USPN 5,699,350 (hereinafter *"Kraslavsky"*) and an alleged Official Notice of the Examiner (hereinafter "*alleged Official Notice*"). Without agreeing as to the *alleged Official Notice*, and for at least the following reasons, Applicants traverse the above rejection.

Applicants respectfully submit that each of the above rejected claims is not obvious in light of *Boucher, Waldbusser*, *Kraslavsky* and the *alleged Official Notice*, based at least on the failure of the references to teach or suggest (emphasis added):

"A network interface, comprising:…circuitry to:

receive and transmit network data…;

generate, based on the receiving and transmitting network data, a set of statistics metering operation of the network interface,…;

periodically initiate **direct memory access transfers of the set of statistics** from the network interface to a memory of the host system accessible by the host processor…"

as recited in current independent claim 1. The claim amendments are supported in the original disclosure at least by FIG. 2 and by paragraphs [0008] and [0011] of the specification.

As discussed in paragraph [0009] of the instant application, direct memory access (DMA) permits memory access **without requiring memory operations to pass through a**

processor. The Final Office Action alleges that features of an intelligent network interface card (INIC) – discussed in *Boucher* col. 44, lines 20-23, col. 56, lines 27-33 and 51-63 and col. 63, lines 17-43 – teach a network interface initiating a DMA transfer of a set of statistics metering operation of the network interface. These features generally relate to an Alacritech TCP (ATCP) driver querying the INIC for statistics. See, e.g. *Boucher* col. 44, lines 15-27.

However, as discussed in *Boucher*, col. 16, lines 35-55, for example, the ATCP driver (1) runs on a host, (2) is based on the FreeBSD operating system, and (3) is coded according to particular coding guidelines. In other words, the relied-upon INIC query operations in *Boucher*, which are alleged to teach a DMA transfer, are instead operations which are **performed by a processor** – i.e. a host processor that queries an INIC by executing the ATCP driver code. *Boucher* fails to provide any details as to whether or how such INIC query operations might include **a DMA transfer** of statistics from an INIC. Rather, any transfer of queried INIC statistics in *Boucher* **is not a DMA transfer because it is a processor** which runs the ATCP driver code to request the INIC statistics.

Moreover, since it is the processor which requests the INIC statistics in *Boucher*, any transfer of the queried INIC statistics is **initiated by that processor**. In other words, any such transfer of queried INIC statistics is **not initiated**, for example, by any alleged **circuitry of the INIC**.

By contrast, current independent claim 1 recites that **a network interface card includes circuitry** to generate a set of statistics based on receiving and transmitting network data, and **to periodically initiate DMA transfers of the set of statistics** from the network interface to a memory accessible by a host processor. Neither *Waldbusser* nor *Kraslavsky* provides any mention of whether or how the type of statistics recited in claim 1 might be transferred by DMA. The *alleged Official Notice* is limited to an alleged obviousness of a time interval. Accordingly, neither *Waldbusser* nor *Kraslavsky* nor the *alleged Official Notice* cures the failure of *Boucher* to teach or suggest the particular DMA transfer recited in current independent claim 1.

Accordingly, independent claim 1 is non-obvious in light of *Boucher, Waldbusser, Kraslavsky* and the *alleged Official Notice*, as are any claims depending therefrom. For at

least the foregoing reasons, Applicants request that the above 35 U.S.C. §103(a) rejection of claims 1-10 and 1-15 based on *Boucher, Waldbusser*, *Kraslavsky* and the *alleged Official Notice* be withdrawn.

***Response to Arguments* Section**

The *Response to Arguments* section of the Final Office Action fails to address arguments – included in Applicants' communication filed March 26, 2009 – demonstrating that the references fail to teach or suggest **a network interface initiating DMA transfer of a set of statistics**. Applicants note that a discussion of M.P.E.P. §2143.01(I) in the *Response to Arguments* seems to relate to previous comments made with respect to a separate question of whether references teach intercepting a data packet.

Notwithstanding the discussion in the *Response to Arguments*, Applicants note that the standard for establishing a case for obviousness is set forth in M.P.E.P. §2142, which states in a salient portion (emphasis added):

> 'The Federal Circuit has stated that "rejections on obviousness **cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning** to support the legal conclusion of obviousness." In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also KSR, 550 U.S. at ___ , 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). '

Absent any response to Applicants' previous explanation that the relied-upon querying of statistics in *Boucher* is performed **by a processor**, the Final Office Action fails to support the proposition that *Boucher* might teach **a network interface initiating DMA transfer of a set of statistics**. Consequently, the claim rejection is improper for failing to provide an **articulated reasoning with some rational underpinning**.

Although some or all of Applicants' previously presented arguments may be variously modified or mooted in view of the current claim amendments, Applicants do not concede any such arguments. Indeed, Applicants reassert, in a revised version below, at least some of the arguments presented in their communication filed March 26, 2009.

Boucher teaches direct memory access (DMA) transfer of received network data into the main memory (col. 63, lines 16-43). However, *Boucher* **does not teach the DMA transfer of the statistics**. Instead, *Boucher* teaches **querving the INIC by CPU**

(col. 44, lines 20-25) (Note that Microsoft Driver is running on the host side, i.e., the host's CPU). The solution proposed by *Boucher* significantly differs from our invention. A CPU running driver code in *Boucher* repeats queries after every time interval by noting the timestamp of the previous query to the INIC. So, for example, if a user application requires the statistics every 100 msec, *Boucher*'s solution would require tens of thousands of queries to INIC by the host's CPU in an hour. On the other hand, in our invention, once the host sends the interval information to NIC (via packets), the periodic DMA push of statistics does not require any repeated query from the CPU.

We disagree with the examiner's alleged Official Notice that it would have been well known to provide configuration information including a time interval value to a network interface card. As explained in previous paragraph, *Boucher*, for example, proposed a significantly different way to periodically obtain statistics, which amounted to having the **periodic time value maintained and used on the host side** when repeatedly querying INIC, as opposed to receiving the time value at the INIC. Although the language of claim 1 is amended herein, a related limitation is still maintained in the claim language with regard to receiving the configuration information from the intercepted packet.

CONCLUSION

For at least the foregoing reasons, Applicants submit that all pending objections and/or rejections have been overcome. Therefore, all pending claims are in condition for allowance and such action is earnestly solicited. The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present application. Please charge any shortages and credit any overcharges to our Deposit Account number 02-2666.

Respectfully submitted,
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